

## ***Pistia stratiotes* (Water lettuce)**

updated 3.11.2013

A floating perennial, resembling a floating head of lettuce. It is disputed as to whether or not it is native to the U.S., as it was observed and documented in William Bartram's 1765 explorations of Florida. High vegetative reproduction, so it is able to rapidly form dense mats on the surface of water bodies.

### **Overview:**

Other names for this plant: None known.

### **Ecological Threat:**

- Invades freshwater lakes, reservoirs, ponds, marshes and slow-flowing streams and rivers making boating, fishing, and almost all other water activities difficult
- Degrades water quality by blocking the air-water interface and greatly reducing oxygen levels in the water, impacting underwater animals such as fish
- Greatly reduces biological diversity: mats block sunlight, preventing growth of submerged and emerged plant communities and also alter animal communities by blocking access to the water and/or reducing plants the animals depend on for shelter and nesting

**Classification:** [Caution](#). This is a non-regulated category.

Species Assessment Groups (SAG) were assembled to recommend a legal classification for each species considered for [NR 40](#). The recommendation for water lettuce was based upon a literature review developed by the department.

### **Identification:**

**Leaves:** Soft and thick, formed in rosettes; have no leaf stems; leaves 6 in. long; light green; parallel ridges (veins); covered in short hairs; leaf margins wavy, top margins scalloped.

**Flowers:** Inconspicuous; nearly hidden in the center amongst the leaves; on small stalk, single female flower below and whorl of male flowers above. Flowers in late summer to early winter

**Fruits & seeds:** a green berry

**Roots:** hang submersed beneath floating leaves; feathery, numerous

**Similar Species:** Not likely to be confused with any other plant

### **Distribution:**

See the reported locations of [water lettuce](#).

Do you know of water lettuce locations? Send us a report.



Karen Brown, University of Florida, Bugwood.org  
<http://www.invasive.org/browse/detail.cfm?imgnum=5344035>



Troy Evans, Eastern Kentucky University, Bugwood.org  
<http://www.invasive.org/browse/detail.cfm?imgnum=5079024>



Leslie J. Mehrhoff, University of Connecticut, Bugwood.org  
<http://www.invasive.org/browse/detail.cfm?imgnum=5273076>



Forest & Kim Starr, U.S. Geological Survey, Bugwood.org  
<http://www.invasive.org/browse/detail.cfm?imgnum=5163014>

### Control \*:

**Mechanical:** Removal by hand or machine is a practical control method often used for small areas or when numbers are low. Physical removal should be completed before flowering and seed set.

#### Chemical

Registered aquatic herbicides can provide temporary control of water lettuce.

#### Biological

Only two insects have been released into the United States as biological control agents against this weed, the South American weevil *N. affinis* and the Asian moth *S. pectinicornis*.

\* Any attempted management of aquatic plants will benefit from the technical guidance of DNR staff in the [Aquatic Plant Management Program](#). [DNR Aquatic Plant Management staff](#) should be contacted prior to implementing any aquatic invasive control methods to ensure proper permits are obtained and protocols are followed.

### Sources:

<http://www.invasive.org/eastern/biocontrol/5Waterlettuce.html>

Center for Aquatic and Invasive Plants: <http://plants.ifas.ufl.edu/node/328>

Invasive.org: <http://www.invasive.org/weedus/subject.html?sub=3064>

Czarapata, Elizabeth 2005. Invasive Plants of the Upper Midwest; pp 147-148